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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,138	07/08/2004	Wilma M. Dausch	254786USOPCT	1425
22850	7590	11/15/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SASAN, ARADHANA	
			ART UNIT 1615	PAPER NUMBER
			NOTIFICATION DATE 11/15/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/500,138

Applicant(s)

DAUSCH ET AL.

Examiner

Aradhana Sasan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/8/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Application

1. Claims 1-6 are included in the prosecution.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 7/8/2004 was filed. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the examiner is considering the information disclosure statement.

See attached copy of PTO-1449.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blankenburg et al. (US 6,153,179).

The claimed invention is a hair-setting composition comprising: A) 0.5 to 20% by weight of a homopolymer of N-vinylcaprolactam (polymer A); B) 0.5 to 20% by weight of a terpolymer of N-tert-butylacrylamide, ethyl acrylate and acrylic acid (polymer B); C) 0.5 to 20% by weight of a polymer chosen from copolymers of vinylpyrrolidone and a

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vinyl ester and from homopolymers of vinylpyrrolidone; and an alcohol and lower alkanes.

Blankenburg teaches a hair setting lotion with "good setting properties combined with good washing out ability and low stickiness without showing the sensitivity to hydrolysis" (Col. 1, lines 14-17). The composition comprises 0.5 – 20% by weight of a homo- or copolymer of at least 70% by weight of N-vinylacprolactam (polymer A) and 0.5-20% by weight of a further film forming polymer (polymer B) (Col. 1, lines 20-24). The working examples disclose the usage of polyvinylcaprolactam ranging from 5-7% by weight (Col. 4, line 17 to Col. 6, line 66). Copolymers of acrylic acid/ethyl acrylate/N-tertiary butyl-acrylamide marketed under the tradename ULTRAHOLD STRONG ® (BASF Akitengesellschaft) are disclosed for polymer B (Col. 2, lines 16-26). Working example 8 discloses the use of terpolymer of N-tert-butylacrylamide, ethyl acrylate and acrylic acid at 2.5% by weight (Col. 6, line 5). Also disclosed are homo- and copolymers of N-vinylpyrrolidone marketed under the tradename LUVISKOL ® (BASF Akitengesellschaft) (Col. 3, lines 1-3). The copolymers of N-vinylpyrrolidone are used at 2.5% in Example 5 (Col. 5, lines 38-39). This polymer forms polymer C in instant claim 1. The reference discloses that polymers A and B are present in a solvent such as water or lower alcohols (Col. 3, lines 42-44). Lower alkanes are disclosed as being included in hair setting lotions that may be used as hair sprays (Col. 3, lines 62-66). Advantages of the hair setting lotion include: forming clear films and having low solution viscosity in aqueous/alcoholic solutions (Col. 4, lines 4-8).

Blankenburg does not expressly teach the inclusion of polymer C with polymers A and B.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make a hair setting composition with polymers A and B, as suggested by Blankenburg, and include polymer C in the composition, and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Blankenburg teaches that "water-insoluble film forming polymers can also be processed in combination with polyvinylcaprolactams to give hair setting lotions which can be readily washed out" (Col. 4, lines 8-11).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Regarding instant claim 1, the limitations of the weight percentages of polymers A and B would have been obvious to one skilled in the art over the 0.5 – 20% by weight of polymer A and 0.5-20% by weight of polymer B taught by Blankenburg. The weight percentage of polymer C or copolymer of N-vinylpyrrolidone would have been obvious to one skilled in the art because Blankenburg teaches the possible inclusion of polymer C with the polyvinylcaprolactams and the weight percentages would have been obvious

variants during the process of routine experimentation unless there is evidence of criticality or unexpected results.

Regarding instant claim 2, the homopolymer of N-vinylcaprolactam would have been obvious to one skilled in the art over the homo- or copolymer of at least 70% by weight of N-vinylacprolactam taught by Blankenburg.

Regarding instant claim 3, the terpolymer of N-tert-butylacrylamide, ethyl acrylate and acrylic acid would have been obvious to one skilled in the art over the acrylic acid/ethyl acrylate/N-tertiary butyl-acrylamide taught by Blankenburg.

Regarding instant claims 4-6, the composition further comprising an alcohol and lower alkanes would have been obvious to one skilled in the art over the solvents such as water or lower alcohols and lower alkanes taught by Blankenburg.


Conclusion

6. No claims are allowed.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradhana Sasan whose telephone number is (571) 272-9022. The examiner can normally be reached Monday to Thursday from 6:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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SUPERVISORY PATENT EXAMINER
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